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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,186	08/24/2000	Donald Fedyk	10360-062001	4310
32836	7590	08/25/2006	EXAMINER	
GUERIN & RODRIGUEZ, LLP 5 MOUNT ROYAL AVENUE MOUNT ROYAL OFFICE PARK MARLBOROUGH, MA 01752			BLOUNT, STEVEN	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

57

Office Action Summary	Application No.	Applicant(s)	
	09/645,186	FEDYK ET AL.	
	Examiner	Art Unit	
	Steven Blount	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final. (*Prosecution Reopened*)
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 2, 5, 8, 13, 14, 20 - 21, 24, 27, 32 - 33, 39, 40, 43, 46, 51, 52, 53, 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1 - 2, 5, 8, 13, 14, 20 - 21, 24, 27, 39, 40, 43, 46, 51, 52, 53, 54.

DETAILED ACTION

A. Prosecution is reopened in view of the new grounds of rejection below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5, 8, 13, 14, 20, 21, 24, 27, 32, 33, 39, 40, 43, 46, 51, 52, 53, 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,363,319 to Hsu in view of U.S. patent 6,295,294 to Odlyzko.

Hsu teaches that, in an MPLS system utilizing LSP's, taking a network resource ("the bandwidth" – see col 1 line 22) from a path having lower priority than a predetermined priority of a data path and allocating it to the data path when no network path having sufficient resource and acceptable cost is selected. See col 1 lines 15 – 23. Hsu does not however teach that the selected path from which these resources is taken must have an "acceptable cost" (line 5 of claim 1).

The selection of channels with an acceptable cost for a bandwidth requirement which is needed to satisfy an "acceptable balance of cost and perceived quality of service" is taught in Odlyzko. See col 2 lines 60+, col 3 lines 1 – 40, and col 5 lines 35+ and col 7 lines 8+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have made sure that the "LSP of the lower priority" from which the

Art Unit: 2616

bandwidth is taken has an acceptable cost in Hsu in light of the teachings of Odlyzko in order to properly balance the needs of the data path which is “borrowing” with those of the rest of the users in the system.

With regard to claim 2, see the rejection above.

With regard to claim 5, see member 240 (topology database).

With regard to claim 8, note the use of MPLS and an LSP.

With regard to claims 13 – 14, see the above.

With regard to claims 20, 21, 24, and 27, note that it would be necessary to implement the above in a software program in order to insure its repeatability.

With regard to claim 32, 33, 39, 40, 43, 46, 51 – 54, see the rejections above.

It is noted that with respect to claims 51 – 52, Hsu teaches memory unit 150 and chipset 145. See figure 1D.

3. Claims 1, 2, 5, 20 – 21, 24, 39, 40, 43, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,687,167 to Bertin in view of U.S. patent 6,295,294 to Odlyzko.

Bertin teaches finding the best path through a network wherein the best path has the fewest number of links (ie, hops, see col 11 lines 24+) and then preempting other existing connections in order to allow the new connection to be established on the link wherein the new and old links are assigned individual priority numbers (see col 14 lines 5+). Bertin et also teaches preempting only lower priority requests. See col 14 lines 26+. Bertin does not however teach preempting channels only if their cost is acceptable.

Odlyzko teaches the selection of channels with an acceptable cost for a bandwidth requirement which is needed to satisfy an "acceptable balance of cost and perceived quality of service."

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Bertin with a means for determining if the pre-empted path has an acceptable cost, in light of the teachings of Odlyzko, in order to insure fair allocation of bandwidth amongst the competing users of the network.

With regard to claim 2, see the rejection above.

With regard to claim 5, see figure 7 in Bertin and note col 4 lines 30+.

With regard to claims 20 – 21, 24, 39 – 40, 43, 51 – 52, see the rejections above.

It is noted that with respect to claims 51 - 52, col 18 lines 55+ of Bertin discuss memory occupation of the topology database, which operates under the control of programmable logic. See also members 20 and 40 in Odlyzko.

4. Claims 8, 13 – 14, 27, 32 – 33, 46, 53 – 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,687,167 to Bertin in view of U.S. patent 6,363,319 to Hsu and U.S. patent 6,295,294 to Odlyzko.

See the rejections above in view of Bertin and Odlyzko, and note that in each of the above claims, an MPLS system is claimed. Note further that in Bertin, a "Label Swapping" system is taught in one of the embodiments. See col 7 lines 10+. Note that MPLS is one obvious type of "Label Swapping" wherein one of ordinary skill in the art would have found it obvious to use MPLS as the "Label Swapping" means in Bertin in

Art Unit: 2616

light of the teachings of Hsu in order to promote an efficient network routing means in view of the many well known advantages offered by MPLS.

REMARKS

5. The examiner notes that the Odlyzko modifying reference is used to provide a very basic teaching – that once bandwidth is decided to be “stolen” from another path, the cost of doing so must be acceptable. In a network, it is obvious that a user would not take the entire networks bandwidth for its own use because the cost would be prohibitive.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 703-305-0319. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached on 571 – 272 - 7629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB


8/16/06



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